DOCUMENT RESUME

ED 353 023 JC 930 055

AUTHOR	Isonio, Steven
TITLE	Implementation and Initial Validation of the Combined English Language Skills Assessment (CELSA) at Golden West College.
INSTITUTION	Golden West Coll., Huntington Beach, Calif.
PUB DATE	Jan 93
NOTE	25p.
PUB TYPE	Reports - Research/Technical (143)
EDRS PRICE	MF01/PC01 Plus Postage.
DESCRIPTORS	Community Colleges; *Cutting Scores; *English (Second Language); *Language Tests; Limited English Speaking; Pilot Projects; Predictive Validity; Scoring Formulas; Student Placement; Test Format; *Test Use; *Test Validity; Two Year Colleges; Two Year College Students
IDENTIFIERS	*Combined English Language Skills Assessment Test; Golden West College CA; Multiple Correlation Formula

ABSTRACT

During spring 1992, the Combined English Language Skills Assessment (CELSA) test was piloted with a sample of English-as-a-Second-Language (ESL) classes at Golden West College (GWC) in Huntington Beach, California. The CELSA, which utilizes a cloze format including parts of conversations and short dialogues, combines items from beginning, intermediate, and advanced levels of the English Language Skills Assessment test, and thus is a useful tool for placing students in all levels of English courses. The pilot test sample consisted of 377 students enrolled in 18 sections of ESL courses in spring 1992, representing all ESL course levels at GWC. To evaluate test validity, test results were matched with each student's instructor-provided recommendation of referral to another ESL or English course for the following semester. In addition, recommended cut scores for class placement were sought to eventually implement the CELSA as a placement test at GWC. The study found a high correlation between CELSA test scores and instructor referrals across the range of ESL course levels, providing clear evidence for the predictive validity of the CELSA. Also, cut scores were determined using the Multiple Correlation Scheme (MCS), which incorporates mean and standard deviation values to identify scores that differentiate adjacent levels. The cut scores were recommended for use with the CELSA as an initial course placement tool at GWC. A set of recommendations for implementing the CELSA at GWC, data tables, the MCS calculation formula, and a description of seven ESL course levels are included. (PAA)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED353023

Implementation and Initial Validation of the Combined English Language Skills Assessment (CELSA) at Golden West College

GOLDEN WEST COLLEGE
Huntington Beach, California

January, 1993

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

S. Isonio

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC).

Steven Isonio, PhD
Advisor, Matriculation Research & Assessment

JC 930055

BEST COPY AVAILABLE

Abstract

The Combined English Language Skills Assessment (CELSA) was pilot tested in a sample of ESL classes at Golden West College during the Spring 1992 semester. Results indicated that CELSA scores are significantly related to referrals that students in all ESL course levels received from their instructors at the end of the term. Further, scores adequately differentiate among students who received different referral levels. Finally, the multiple classification scheme (MCS) was used to generate cut scores that comprise a placement rule recommended for implementation at GWC. This placement rule incorporates information from a writing sample to support a definitive placement for students scoring in the upper ranges of the distribution. The need to closely monitor the placement rule after implementation is stressed. Also, studies of possible disproportionate impact of the CELSA must be conducted.

Implementation and Initial Validation of the Combined English Language Skills Assessment (CELSA) at Golden West College

Steven Isonio, Ph.D.

Introduction.

Background. Initial placement into basic skills and ESL courses is typically accomplished with the use of standardized placement tests. At Golden West College, commercially available instruments in various approval categories have previously been identified and implemented for both English and mathematics. As of Fall 1992, only a single ESL placement test, the Combined English Language Skills Assessment (CELSA) has met the standards for approval put forth by the California Community Colleges Chancellor's Office (California Community Colleges, 1992). In anticipation of the full approval of this instrument and with the expectation that it would eventually be implemented at Golden West College, the CELSA was piloted in Spring 1992. This report describes the pilot study, presents evidence supportive of its validity, and offers recommendations for the implementation of the CELSA at GWC.

Description of the CELSA. The CELSA uses a cloze format, including parts of conversations and short dialogues. In developing items, common student errors offered by experienced language teachers were selected to be distractors in the multiple-choice format. This experience was combined with extensive item analyses to yield items that have high discriminating power and appropriate difficulty levels.

Additionally, the CELSA User Manual (Ilyin, 1992) presents some normative data from studies at a number of community colleges and adult learning programs. Results of these studies establish the internal consistency of the test and offer predictive validity evidence for its use as a placement instrument. Additionally, relationships between the CELSA and other measures of English language skills are represented, indicating a degree of convergent validity.

The CELSA includes items from the beginning, intermediate, and advanced levels of the English Language Skills Assessment (ELSA). As such, it can be used for making placement recommendations for the students along the full range of English language skill levels. Normative information and conversion tables with descriptive labels used by San Francisco Community College ESL and Adult Education Programs are provided (see Appendix A). This descriptive information can serve as an "anchor" for colleges seeking to implement the CELSA and to coordinate score ranges with their own ESL course levels.

Method.

Design. The basic design of the study entailed administering the CELSA to a sample of ESL students and then relating CELSA test scores to instructor evaluations of the students. The evaluations were made in the form of referrals/recommendations for an ESL or English course the following semester.

Participants. The sample consisted of a total of 377 students enrolled in 18 sections of ESL courses during the Spring 1992 semester. All course levels were represented (see Table 1; all Tables and Figures appear in the Appendix). Analyses were conducted on data from students who both tested with the CELSA and received an instructor's recommendation (n = 349).

Procedure. A study designed to determine the appropriateness of the CELSA as a placement instrument at GWC was planned in early Spring of 1992. At that time, no ESL instrument had earned any level of approval from the Chancellor's review process. Further, GWC had been notified that the currently used instrument, the ELSA was no longer published and that its publisher (Newbury House) had indicated that it would not provide the necessary supportive information for it to be eventually approved. Discussions of the merits of the CELSA had taken place at statewide assessment workshops, and within the Coast Community College District at a meeting of ESL chairpersons form Golden West and Orange Coast Colleges, interested faculty, and assessment specialists.

A number of ESL classes during the Spring 1992 semester were identified for inclusion in the sample. With the cooperation of the then Chairperson of the GWC ESL Department, instructors were contacted and asked for permission to use approximately one hour of class time during the last two weeks of the semester in order to administer the CELSA to students. The tests were administered to both day and evening classes representing the full range of

ESL levels. All participating instructors were further asked to provide copies of their rosters showing the referrals/ recommendations they had made for the students in their classes. Test data and referral information were then matched for analysis.

Results.

Overview of the Analyses. There were two major components to the analysis. The first was designed to assess the relationship between CELSA test scores and instructor referrals. Specifically, correlations were computed within ESL levels and the median correlation was calculated across levels. These analyses served to establish whether the CELSA had predictive validity. The second set of analyses was intended to develop recommended cut scores (an overall placement rule) for actually implementing the CELSA at GWC. In this case, a variety of approaches was undertaken.

Predictive Validity. The primary index of predictive validity of a placement test is its relationship, as evidenced by a correlation coefficient, to a reasonable criterion of performance in class; typically this criterion is the course grade. Since ESL courses at GWC are ungraded (students receive "credit/no credit" instead of the letter grade scale), the instructors referral/recommendation was used as the criterion against which to gauge the predictive ability of the CELSA. The referrals have an added strength in this regard; they constitute

an instructor's judgment of the class which is most appropriate for the student the next semester. Like grades, they reflect an evaluation of work performed over the course of the term, but unlike grades they are more clearly a statement of the student's readiness for a future class. This, of course, is precisely the intended function of placement tests.

Table 2 presents correlations between CELSA test scores and ESL instructor referral levels (considered an interval scale of measurement), by ESL course level. These values have been corrected for restriction of range due to the use of intact, pre-selected groups (Matriculation Local Research Options Committee, 1991). The r values range from .41 (for ESL 004) to .79 (for both ESL 001 and the combined ESL 900/001), with a median value of $r = .59$. Collapsing across levels, the overall relationship between CELSA scores and instructor referrals is somewhat high ($r = .72$). In all cases, the correlation coefficients are statistically significant. Thus, there is clear evidence for the predictive validity of the CELSA as a placement tool for ESL courses at GWC.

Development of a Placement Rule. Since the instructor referrals indicate which course is considered most appropriate for a student the following semester, they were used to create sub-distributions for comparison purposes in support of the development of cut scores. Table 3 shows selected descriptive statistics for the sub-distributions of students receiving each of the seven referral levels. As can be seen, the CELSA is able

to adequately differentiate among referral levels, as evidenced by the spread of mean and median score values across levels (Figure 1 depicts mean CELSA scores, by referral level). An analysis of variance performed on CELSA scores by referral levels indicated highly significant differences among the levels [F (6, 342) = 91.21, $p < .001$.]. The Tukey-Kramer test was used for multiple comparisons because of its appropriateness in cases where there is at least a moderate imbalance in sample sizes (Dunnett, 1980). This analysis revealed that all pairwise difference comparisons are statistically significant, except for the difference between the values for (ESL 001) and (ESL 002); these results are summarized in Table 4. Finally, the coefficients of skewness indicate that, with the exception of referral level 2, the sub-distributions are relatively symmetrical.

The CELSA User Manual (Ilyin, 1992) describes and recommends the Multiple Classification Scheme (MCS; developed by Cooley and Lohnes, 1971). It incorporates mean and standard deviation values for adjacent groups in identifying a score level (a cut score) that best differentiates the two groups. The formula for using the MCS is presented in Appendix A of this report. The result of the MCS computations and resulting recommended cut scores are presented in Table 5. The second column of that Table contains the MCS-calculated cut scores which should serve as the <u>upper</u> limits of the score ranges. These values are rounded upward and used to define placement score ranges depicted in the

last column of Table 5. As can be seen, the score ranges for the lowest group is "0 to 23". Ten score values (range 24 to 33) are associated with ESL 001; the next 8 and then 9 score values are associated with ESL 002 (34 to 41) and ESL 003 (42 to 50), respectively. The next five score values (51 to 55) would recommend placement into ESL 004 and the following five (56 to 60) to ESL 005. Finally, scores of 61 or greater would result in placement recommendations to English 10.

As shown in Table 5, the score ranges differentiating the highest placements are not as wide as those associated with the lower levels. An ESL placement writing sample (PWS) has been used at Golden West College to assist in making definitive placements for students scoring in the upper ranges of score values. Holistic evaluations of the ESL PWS have previously been shown to be reliable (Isonio, 1992). The ESL PWS can be incorporated into the model developed for the CELSA in a similar way so as to make definitive placements. A reasonable scheme for doing so would be to evaluate writing samples for all students scoring in the ranges associated with ESL 005 and English 10. In this way, those students scoring 56 to 60 would either retain the ESL 005 recommendation or receive a placement recommendation to ESL 004 or to English 10. Similarly, students scoring 61 or above would be referred to ESL 005, or to English 10, depending upon the evaluation of their writing sample. (The placement scheme that incorporates the ESL placement writing sample is depicted in Table 6.) In short, both the multiple

classification scheme and the examination of CELSA score sub-distributions, in a variation of the contrasting groups approach, support the appropriateness of the recommended initial placement rule.

Summary and Discussion.

Evidence has been presented that supports the value of the CELSA as a placement instrument at Golden West College. Using instructor referrals/recommendations as the primary criterion against which to gauge CELSA scores, impressive predictive validity coefficients were obtained across the range of ESL course levels thereby establishing that there is a significant relationship between CELSA scores and this criterion. Further, both analyses using the MCS approach and the contrasting groups method to develop a rule for generating course placement recommendations were performed. These approaches converge in their support of a placement rule for ESL levels 900 through ESL 5, and above. Further, to clarify the placement associated with high score ranges, the ESL Placement Writing Sample should be used to make a definitive placement for students scoring in the ranges associated with ESL 005 and English 10/100.

Recommendations.

1. The Combined English Language Skills Assessment (CELSA) should be adopted and implemented as the primary ESL placement measure at Golden West College. This instrument has received provisional approval by the Chancellor's Office and the evidence presented in this report supports its appropriateness as a placement tool at GWC.

2. The placement rule depicted in Table 6 should be used initially. It was derived from the Multiple Classification Scheme recommended by the author of the CELSA and is consistent with an examination of the graphical representation of CELSA score sub-distributions for contrasting groups.

3. This placement rule should be monitored for its effectiveness. Instructors and students in a sample of ESL courses should provide midterm ratings of the appropriateness of the placement. These ratings would therefore serve to corroborate the initial placement scheme or provide a basis for adjustments deemed necessary.

4. Information from other measures should be collected and analyzed to support the eventual development of a multiple measures placement model for ESL courses.

5. Studies of possible disproportionate impact and differential validity of the CELSA as a placement instrument at Golden West College should be conducted.

6. Item analyses by referral level subgroups should be performed to support the ongoing examination of the ESL curriculum.

References

California Community Colleges. (1992). Assessment Instruments Approval Status Summary.

Cooley, W. W. & Lohnes, P. R. (1971). Multivariate Data Analysis. New York: Wiley and Sons.

Dunnett, C. W. (1980). Pairwise multiple comparisons in the homogeneous variance, unequal sample size case. Journal of the American Statistical Association, 75, 789-795.

Ilyin, D. (1992). Users Guide for Combined English Language Skills Assessment (CELSA). San Francisco: Association of Classroom Teacher Testers.

Isonio, S. (1992). Judgments of ESL placement writing samples at Golden West College: An evaluation of inter-rater reliability. Golden West College, Huntington Beach, CA.

Matriculation Local Research Options Committee. (1991). Assessment Validation Project Local Research Options. February, 1991.

APPENDICES

		Page
A	Adult Education Proficiency Levels--San Francisco Community College Instructional Levels	12
	Multiple Classification Scheme--Calculation Formula	13
B	Table 1: Number of Students (and Sections) Sampled in the CELSA Pilot Study, By ESL Course Level	14
	Table 2: Predictive Validity Coefficients, By Course Level	15
	Table 3: Selected CELSA Score Descriptive Statistics For Referral Sub-Distributions	16
	Table 4: Results of the Multiple Comparison Test for Differences Between Pairs of Means	17
	Table 5: Multiple Classification Scheme (MCS) Placement Rule	18
	Table 6: Recommended Initial Placement Rule for CELSA at Golden West College	19
C	Figure 1: Mean CELSA Score, By Referral Level	20

ADULT EDUCATION ESL PROFICIENCY LEVELS

The San Francisco Community College Centers' revised ESL Master Plan describes eight levels of instruction beginning with level 50, which is a basic literacy course as well as an introductory course for students with zero proficiency in speaking, reading, and comprehending English. For obvious reasons, formal testing is not done at this level. Levels 100-700 are described below. These levels lend themselves well to the two CELSA test forms. Conversion tables for placement are presented in Tables 1 and 2 and on the keys.

LOWER BEGINNING (ESL 100): Designed for the student with little knowledge of English, the basic goal is for students to begin to communicate and conduct the affairs of daily life in spoken and written English. High frequency vocabulary is emphasized and regular forms of the present, past, and future are covered in the standard transformations (affirmative, negative yes/no and WH-questions).

UPPER BEGINNING (ESL 200): Students continue to gain simple communicative ability to function in practical areas necessary for survival in the United States. Although students read short authentic passages and simple conversations, emphasis continues to be on oral production and listening comprehension with an expansion of the structures of level 100 to include irregular past forms, present perfect, modals, and comparison using adjectives and adverbs.

LOWER INTERMEDIATE (ESL 300): A period of transition when students assimilate previously learned material and begin to develop fluency as well as accuracy both in spoken and written English. Students read both short authentic materials as well as adapted reading selections. Complex sentences using noun, adjective and adverb clauses are introduced; past forms in the continuous and perfect tenses and conditionals in the present and future are stressed.

UPPER INTERMEDIATE (ESL 400): Advanced grammatical structures such as complex sentences using embedding and relative clauses, passive forms, future perfect and continuous, unreal conditionals, and complex word order are introduced. Students continue to read authentic materials and selections appearing in ESL texts. Students often are in vocational courses for training or upgrading.

LOWER ADVANCED (ESL 500): Students learn to use more advanced structures including modal auxiliaries in past forms, future perfect, perfect continuous forms, and perfect conditional forms. They also continue to assimilate proper stress, intonation, and rhythm of spoken American English. Written compositions and oral presentations are a basic part of the course along with the use of mass media (radio, TV) to improve listening skills. Students read authentic materials as well as text materials in ESL texts.

UPPER ADVANCED (ESL 600): Students review materials from previous courses and prepare for high school diploma courses, college entrance, or more advanced vocational training. A thorough review of English grammar, advanced reading skills, composition, and student research projects are basic components of the course. A division certificate is awarded upon successful completion of this level.

ADVANCED PLUS (ESL 700): Students work on the skills necessary to function in academic situations in non-ESL classes on high school, college, and university levels. Emphasis is on the expansion of vocabulary, grammatical analysis and comprehension and other reading skills. Writing skills, including composition and research are also emphasized.

Multiple Classification Scheme[1] to Establish Cut Scores Between Adjacent Levels

LEVEL 1
LEVEL 2

$$\text{CUTOFF} = \frac{\bar{X}_1(S_2) + \bar{X}_2(S_1)}{S_1 + S_2}$$

where S = Standard Deviation

$\bar{X}$ = Mean

Subscripts 1 and 2 indicate level 1 and 2, respectively

[1] (SEE: Cooley & Lohnes, 1971)

Table 1

Number of Students (and Sections) Sampled in the CELSA Pilot Study, By ESL Course Level

Course Level	Number of Sections	Number of Students
ESL 900	1	24
ESL 900/001	2	45
ESL 001	1	27
ESL 002	3	67
ESL 003	2	57
ESL 004	3	87
ESL 005	3	70
Total	15	377

Table 2

Predictive Validity Coefficients, By Course Level

Course Level	Validity Coefficient
ESL 900	.52
ESL 900/001	.79
ESL 001	.79
ESL 002	.70
ESL 003	.59
ESL 004	.41
ESL 005	.47
	Median $\underline{r}$ = .59

Note: All validity coefficients for individual course levels have been corrected for restriction of range.

Table 3

Selected CELSA Score Descriptive Statistics of Referral Level Sub-Distributions

	CELSA Score		
Referral Level	Mean	Median	St.Deviation
ESL 900	16.50	15.5	12.19
ESL 001	30.72	30	11.95
ESL 002	33.72	37	9.90
ESL 003	46.74	47	8.93
ESL 004	52.97	54	9.67
ESL 005	56.58	57	8.86
ENG 010	62.23	63	9.40
Total	48.32		14.38

Table 4

Results of Multiple Comparison Tests For Differences

Between Pairs of Means

Levels / Means In the Comparison	Critical Difference (p<.05)	Obtained Difference
ESL 900 (16.50) ESL 001 (30.72)	8.60	14.22*
ESL 001 (30.72) ESL 002 (33.70)	4.57	2.98
ESL 002 (33.70) ESL 003 (46.74)	3.31	13.04*
ESL 003 (46.74) ESL 004 (52.97)	3.20	6.23*
ESL 004 (52.97) ESL 005 (56.58)	3.23	3.61*
ESL 005 (56.58) ENG 010 (62.23)	3.59	5.65*

* $p < .05$

(Note: Comparisons were based on the Tukey-Kramer procedure.)

Table 5

Multiple Classification Scheme (MCS) Placement Rule

Referral Level	MCS Cut (Upper)	Placement Score Range
ESL 900	22.76	<= 23
ESL 001	32.42	24-33
ESL 002	40.25	34-41
ESL 003	49.73	42-50
ESL 004	54.85	51-55
ESL 005	59.32	56-60
ENG 010		>=61

Table 6

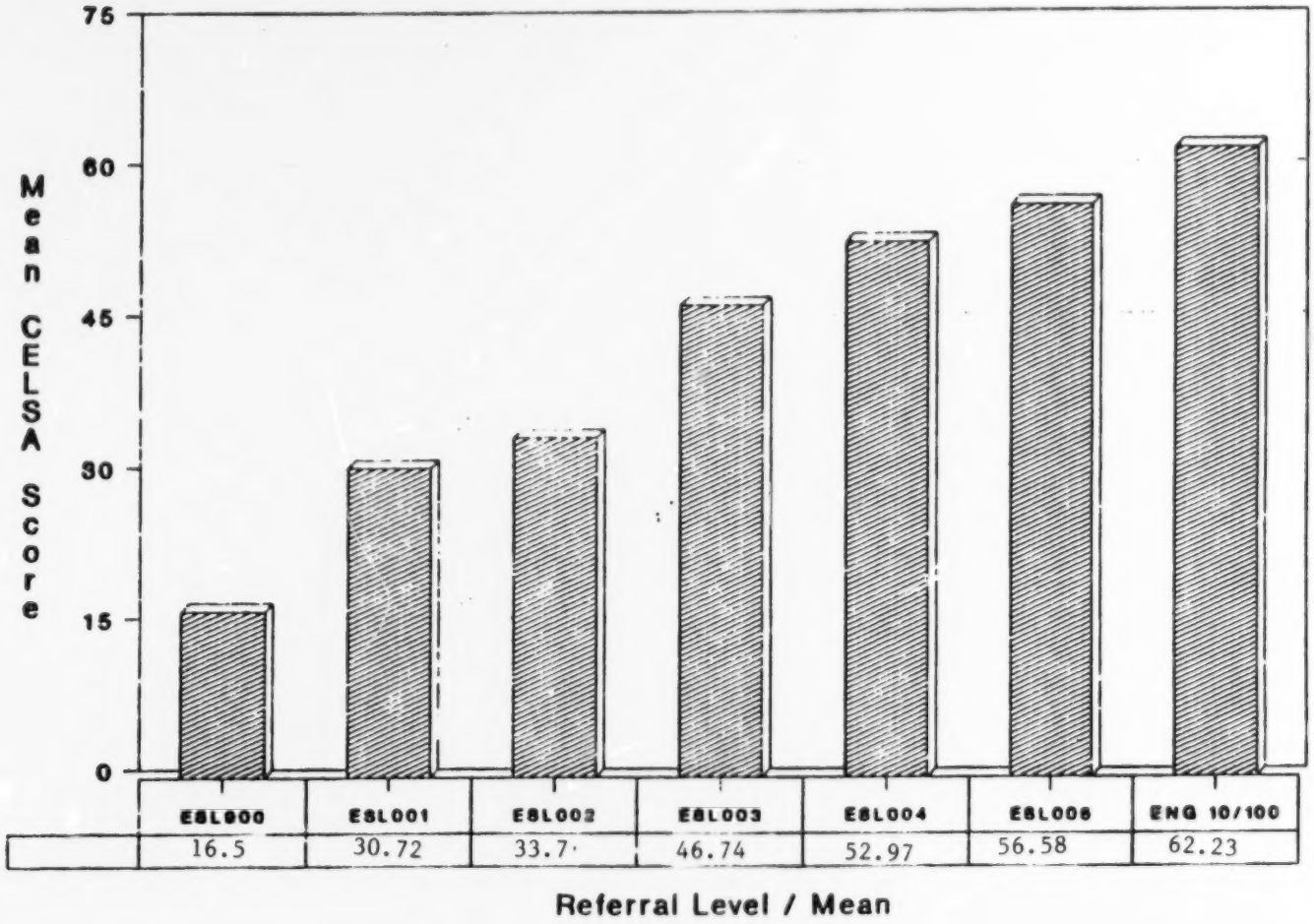
Recommended Initial Placement Rule for CELSA at Golden West College

Placement Recommendation	CELSA Score Range
ESL 900	<= 23
ESL 001	24 - 33
ESL 002	34 - 41
ESL 003	42 - 50
ESL 004	51 - 55
ESL 005 or higher*	56 - 60
English 010 or higher*	>= 61

*ESL Placement Writing Samples are evaluated for students scoring in these ranges.

Figure 1.

Mean CELSA Score, By Referral Level



Acknowledgments

I wish to thank Donna Ilyin for granting permission to include an excerpt from the CELSA User Manual in the Appendix of this report and Carol Cooperman for her help in preparing the final draft of this report.